

## Methodology for Preparing an Oral Presentation of a Scientific Paper

(I assume the talk is organized around slides/overheads)

- 1) Read the paper
- 2) Take whatever steps necessary to ensure that you understand its content
- 3) List the following
  - the problem to be solved
  - the method(s) used
  - the data
  - the interpretation of the data and the assumptions used
  - the implications/significance
- 4) Identify the external constraints on your talk (time, method of presentation, etc.)
- 5) Determine how many slides/overheads you can use  
(The ACS recommends spending at least 2 minutes on each slide/overhead))
- 6) Determine the levels of knowledge of your audience and the levels you want to address them (you could decide to ignore the masses and give a talk only for experts, but this is not recommended)
- 7) Given items (4-6) decide on goals for your talk (take home message, ..) and what you need to present to accomplish that goal
- 8) Prepare a preliminary outline  
(Each slide should be on a single point)
- 9) Write first draft of text
  - Each slide should be titled (24 point font)
  - Other text should be 18 point font. No full sentences
  - Figures and tables should be legible, titled, and axes clearly labeled (units !)\*
  - Use color/formatting to highlight main points as necessary
  - Make sure that the logic flows and that you have transitions between each slide
- 10) Review draft and outline in light of goals; decide on points to revise
- 11) Prepare final text

\* Small print and Figures are often illegible once scanned into a computer. Verify the quality of scanned items or use a transparency instead!

## **Guidelines for Giving an Oral Presentation of a Scientific Paper**

(I assume the talk is organized around slides/overheads)

- 1) Do the Methodology for Preparing an Oral Presentation of a Scientific Paper
- 2) Practice the talk for an audience and get oral and written feedback.
- 3) A monotone delivery puts people to sleep. Modulate your voice to show your excitement!
- 4) Make sure your spoken words provide a logical transition from one slide to the next.
- 5) Use the title of each slide near the beginning of your spoken text for that slide
- 6) Do not memorize your text. Rather, ensure that you know the points you want to make in the order you want to make them. (I sometimes write the points down on the paper separating each slide).

Finally, you may be nervous and thinking of how embarrassed you will be if you don't do a good job. Think instead of serving your audience, of making your talk valuable to them by giving them 1-3 take home points. Think: your audience may be facing talk after talk on unfamiliar subjects, to be received under adverse conditions (fatigue, a warm dark room, nervousness about their own upcoming talk, etc.). Think of their needs, not your own, and the butterflies may quiet down.